

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY
(CHAPTER I OR CHAPTER II
OF THE PATENT COOPERATION TREATY)
(PCT Rules 44bis.3(c) and 72.2)

To:

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Chuo-Ku, Tokyo 1040041
JAPON

Date of mailing (<i>day/month/year</i>) 21 June 2007 (21.06.2007)	
Applicant's or agent's file reference S05P1581WO00	IMPORTANT NOTIFICATION
International application No. PCT/JP2005/020968	International filing date (<i>day/month/year</i>) 15 November 2005 (15.11.2005)
Applicant SONY CORPORATION et al	

1. Transmittal of the translation to the applicant.



The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter I).



The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

2. Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

EP

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Masashi Honda
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PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference S05P1581WO00	FOR FURTHER ACTION	See item 4 below
International application No. PCT/JP2005/020968	International filing date (<i>day/month/year</i>) 15 November 2005 (15.11.2005)	Priority date (<i>day/month/year</i>) 07 December 2004 (07.12.2004)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant SONY CORPORATION		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the report |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input checked="" type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

<p style="text-align: center;">The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. +41 22 338 82 70</p>	<p>Date of issuance of this report 13 June 2007 (13.06.2007)</p> <p>Authorized officer Masashi Honda</p> <p>e-mail: pt08.pct@wipo.int</p>
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PATENT COOPERATION TREATY

TRANSLATION

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing
(day/month/year)

Applicant's or agent's file reference

S05P1581WO00

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/JP2005/020968

International filing date (day/month/year)

15.11.2005

Priority date (day/month/year)

07.12.2004

International Patent Classification (IPC) or both national classification and IPC

Applicant

SONY CORPORATION

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP	Date of completion of this opinion	Authorized officer
Facsimile No.		Telephone No.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/020968

Box No. I

Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:
 - ☒ the international application in the language in which it was filed
 - ☐ the translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rule 12.3(a) and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material
 - ☐ on paper
 - ☐ in electronic form
 - c. time of filing/furnishing
 - ☐ contained in the international application as filed
 - ☐ filed together with the international application in electronic form
 - ☐ furnished subsequently to this Authority for the purposes of search
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/020968

Box No. IV Lack of unity of invention

1. ☐ In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has, within the applicable time limit:
- ☐ paid additional fees
 - ☐ paid additional fees under protest and, where applicable, the protest fee
 - ☐ paid additional fees under protest but the applicable protest fee was not paid
 - ☐ not paid additional fees
2. ☒ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
- ☐ complied with
 - ☒ not complied with for the following reasons:

The subject matters of claim group A (claims 1, 10, 19, 28 and 35-38) relate to subjecting a content to scramble processing in accordance with a scramble rule and recording the scramble rule and scramble content in a recording medium.

The subject matters of claim group B (claims 2, 11 and 20) relate to the use of a different scramble rule for each content.

The subject matters of claim group C (claims 3, 12, 21 and 29) relate to the use of replacement in scramble processing.

The subject matters of claim group D (claims 4, 13, 22 and 30) relate to shuffle in scramble processing.

The subject matters of claim group E (claims 5, 14, 23 and 31) relate to an exclusive OR operation as scramble processing.

The subject matters of claim group F (claims 6, 15, 24 and 32) relate to the use of rotation in scramble processing.

The subject matters of claim group G (claims 7, 8, 16, 17, 25, 26 and 33) relate to encryption processing being carried out in addition to scramble processing.

The subject matters of claim group F (claims 9, 18, 27 and 34) relate to designation of data to be subjected to scramble processing.

The matter common to claim groups A-F is the configuration of claim group A, but the common matter belongs to the prior art, and therefore the subject matters of claim groups A-F are not considered to meet the requirement of unity of invention, since they are not considered to share a special technical feature.

4. Consequently, this opinion has been established in respect of the following parts of the international application:

☒ all parts

☐ the parts relating to claims Nos. _____

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/JP2005/020968

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	7, 8, 16, 17, 25, 26, 33	YES
	Claims	1-6, 9-15, 18-24, 27-32, 34-38	NO
Inventive step (IS)	Claims		YES
	Claims	1-38	NO
Industrial applicability (IA)	Claims	1-38	YES
	Claims		NO

2. Citations and explanations:

Document 1: JP, 10-145773, A (Toshiba Corporation), 29 May, 1998 (29.05.98)

Document 2: JP, 7-281596, A (International Business Machines Corporation), 27 October, 1995

Document 3: JP, 2004-342246, A (Sony Corporation), 2 December, 2004 (02.12.04)

Claims 1, 10, 19, 28 and 35-38

Document 1 (paragraphs [0014]-[0016] and Figs. 2-4) describes that a content is subjected to scramble processing in accordance with a scramble rule, and a scramble content ("encoded data") produced in the processing and the scramble rule are recorded in an information recording medium. Therefore, the subject matters of claims 1, 10, 19, 28 and 35-38 do not appear to be novel in view of document 1.

Document 2 (paragraphs [0017]-[0028] and Figs. 1-7) describes that a content ("data segment") is subjected to scramble processing in accordance with a scramble rule ("random number"), and a scramble content ("encoded data segment") produced in the processing and the scramble rule are recorded in an information recording medium. Therefore, the subject matters of claims 1, 10, 19, 28 and 35-38 do not appear to be novel in view of document 2 as well.

Claims 2, 11 and 20

Document 2 (paragraph [0023]) describes that when two or more contents ("data segments") exist, a different scramble rule ("random number") is used for each content, and therefore the subject matters of claims 2, 11 and 20 do not appear to be novel in view of document 2.

Claims 3-6, 12-15, 21-24 and 29-32

Document 2 (paragraph [0020]) describes that scramble processing includes shuffle processing ("rearrangement of bit orders"), exclusive OR operation processing ("exclusive OR") and rotation processing ("shift"), and therefore the subject matters of claims 3-6, 12-15, 21-24 and 29-32 do not appear to be novel in view of document 2.

Claims 7, 16 and 25

Document 3 (paragraphs [0170]-[0193]) describes that a content is double encoded and then recorded in a recording medium, and it is considered to be easy for a person skilled in the art to encode the content of a document before or after scramble processing and then record the content in the recording medium.

Claims 8, 17, 26 and 33

The data size as a processing unit for scramble processing and encoding processing is a matter of design variation that should be determined as required by a person skilled in the art. A person skilled in the art could have easily conceived of carrying out scramble processing and

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/020968

Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

encoding processing at a high speed when determining the unit data size, and enhancement of the speed by carrying out the processing at a speed integral multiple of the register size of the processor is a well-known technique. Therefore, it is considered to be easy for a person skilled in the art to set the data processing unit of scramble processing of document 1 equal to the data processing unit of encoding processing.

Claims 9, 18, 27 and 34

Document 1 (paragraph [0014]) describes that an I picture is included in data to be subjected to scramble processing, and therefore the subject matters of claims 9, 18, 27 and 34 do not appear to be novel in view of document 1.